

Figure 1a (Prior Art)
Guide vanes in diffuser discharge

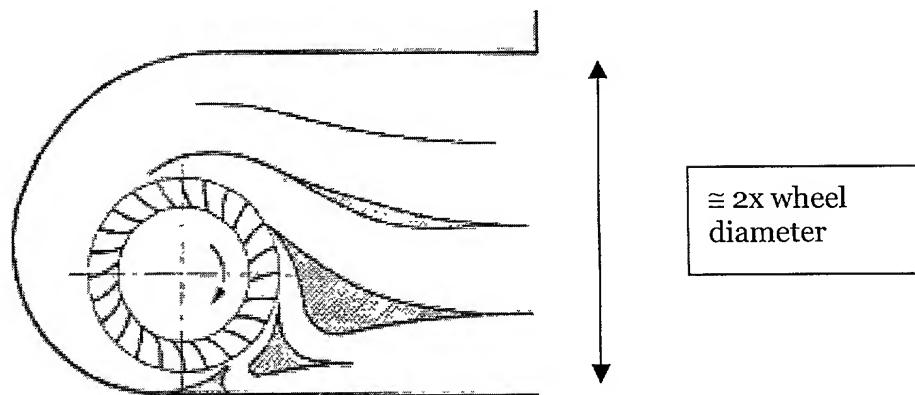


Figure 1b (Prior Art)
High aspect ratio discharge

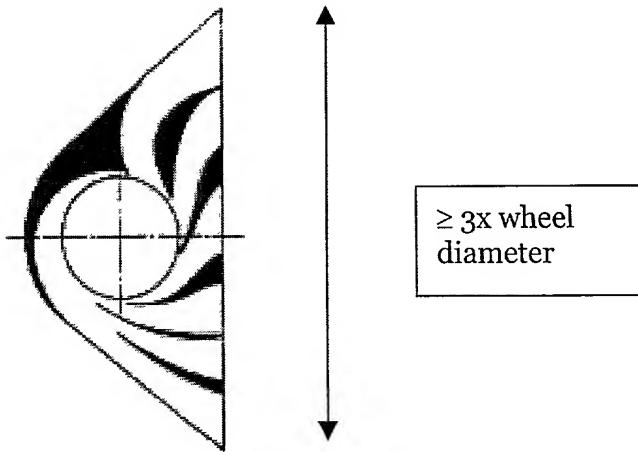


Figure 1c (Prior Art)
Very high aspect ratio discharge

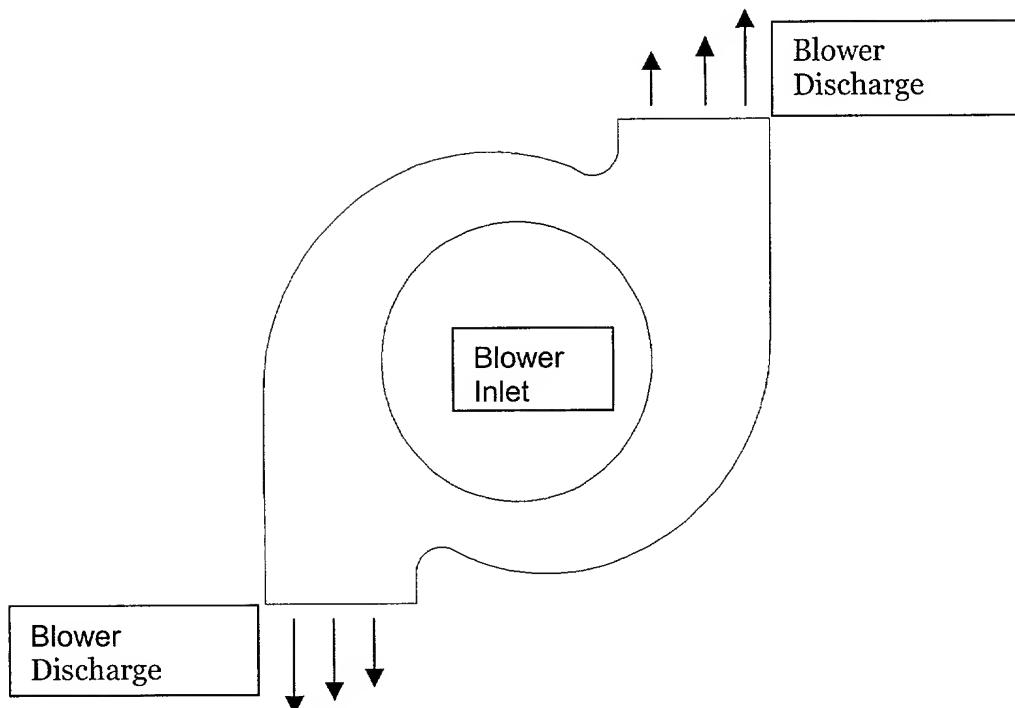


Figure 2a (Prior Art)
180° opposed discharges

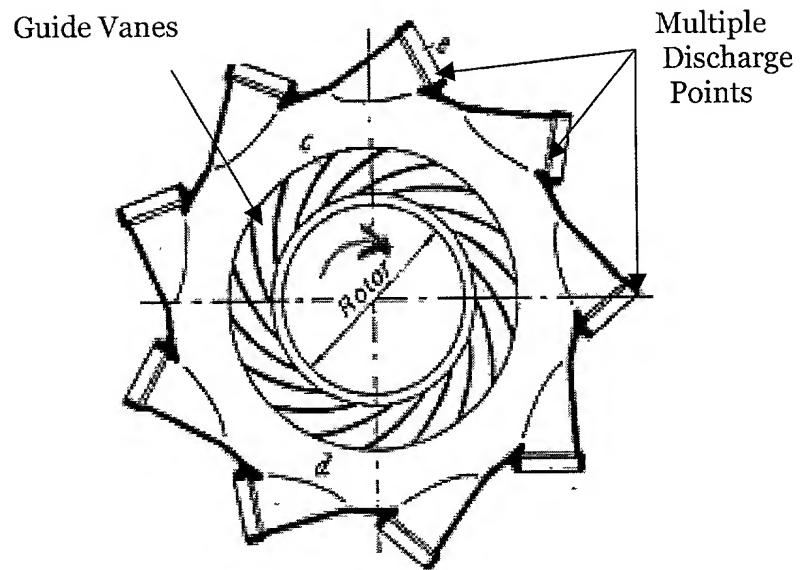


Figure 2b (Prior Art)
Vane diffuser w/ multiple discharges

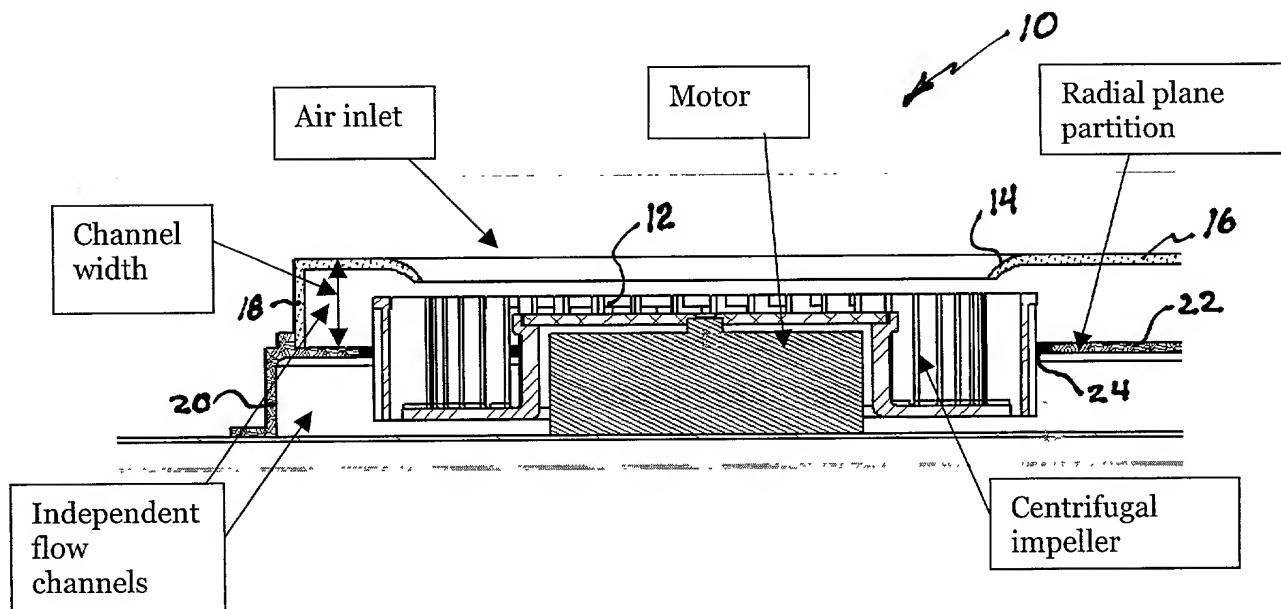
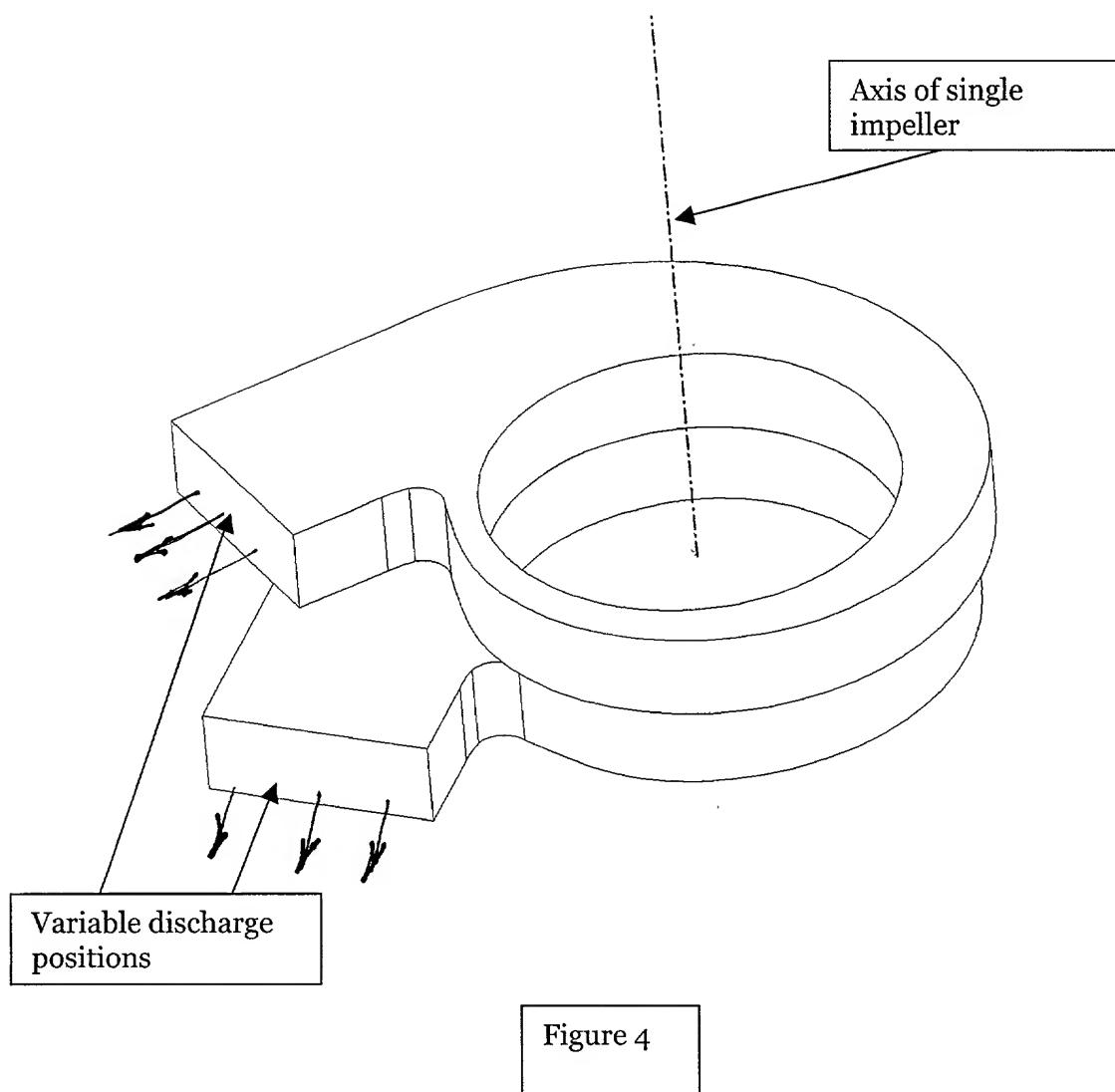


Figure 3
New design approach



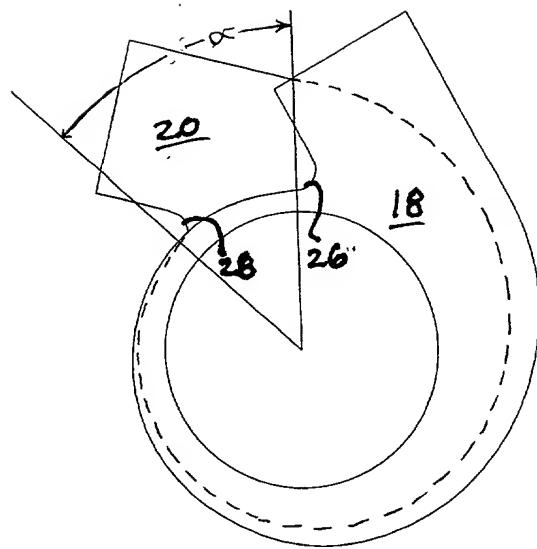


Figure 5
Infinitely variable scroll cutoff angle

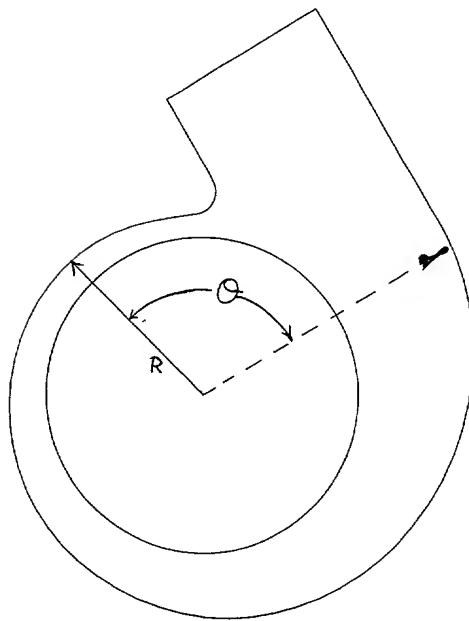


Figure 6
Scroll expansion

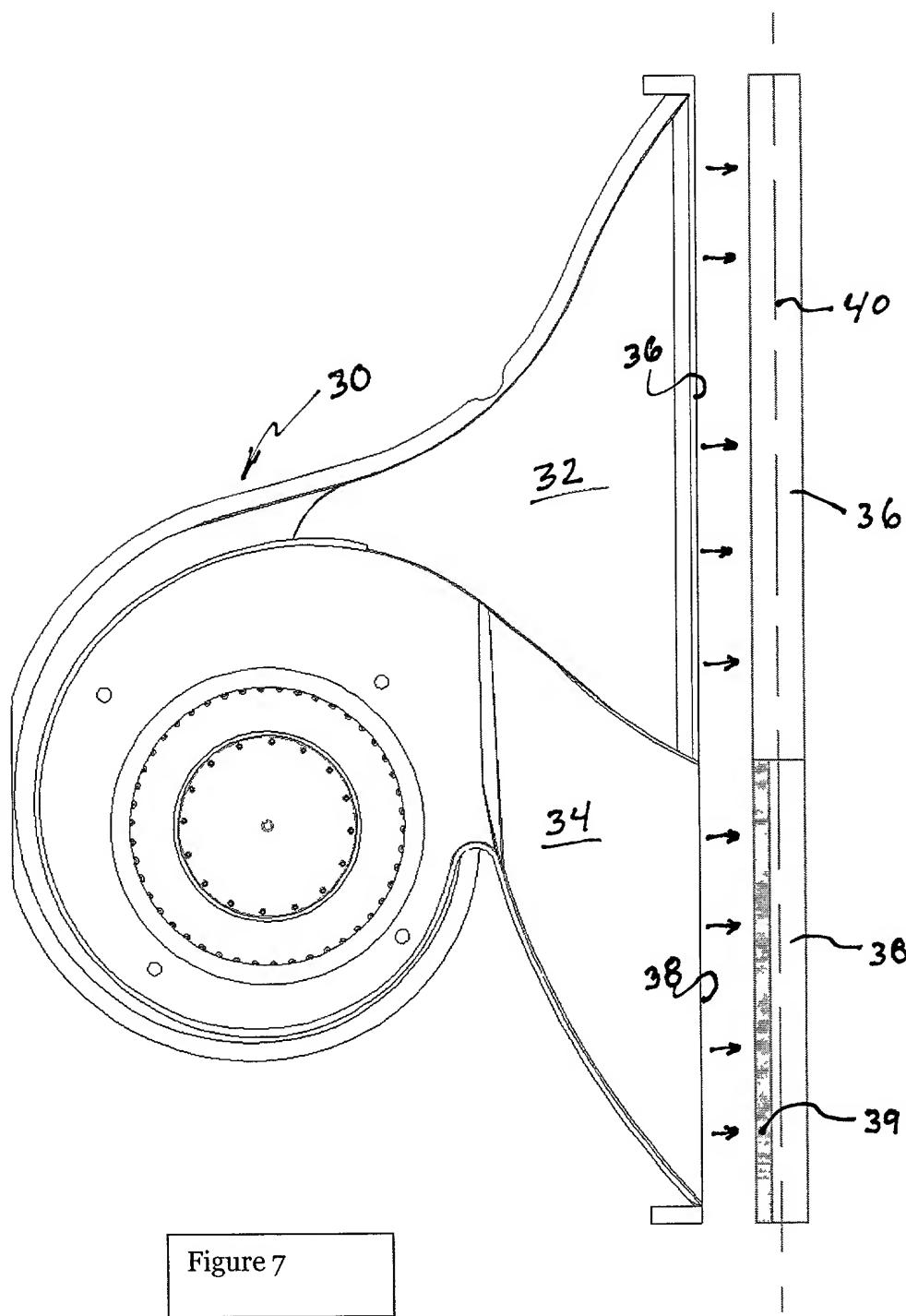


Figure 8

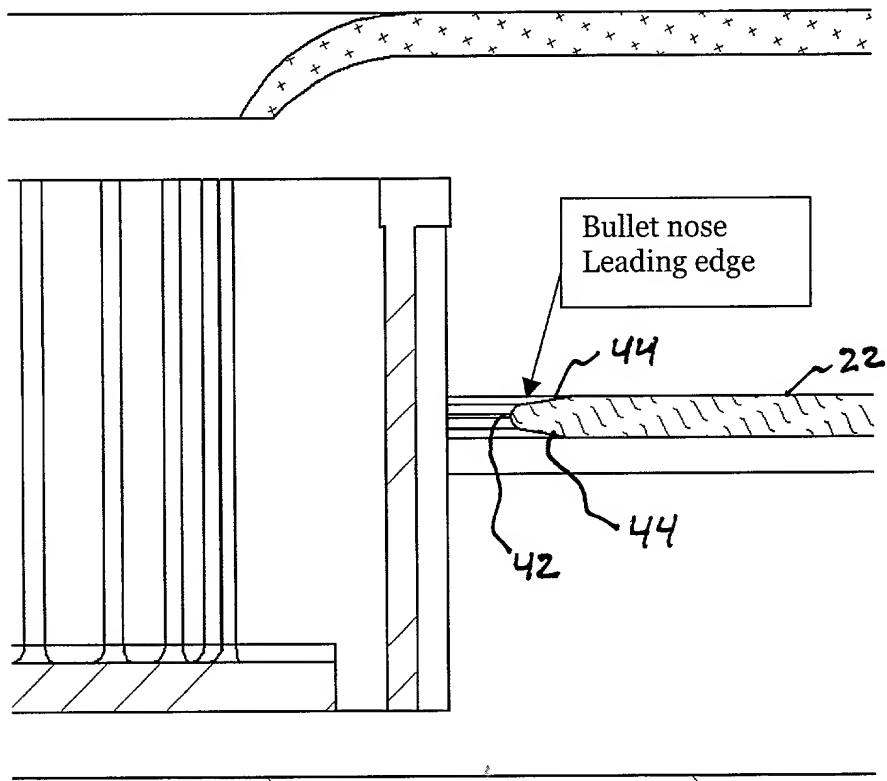


Figure 9
Radial plane partition

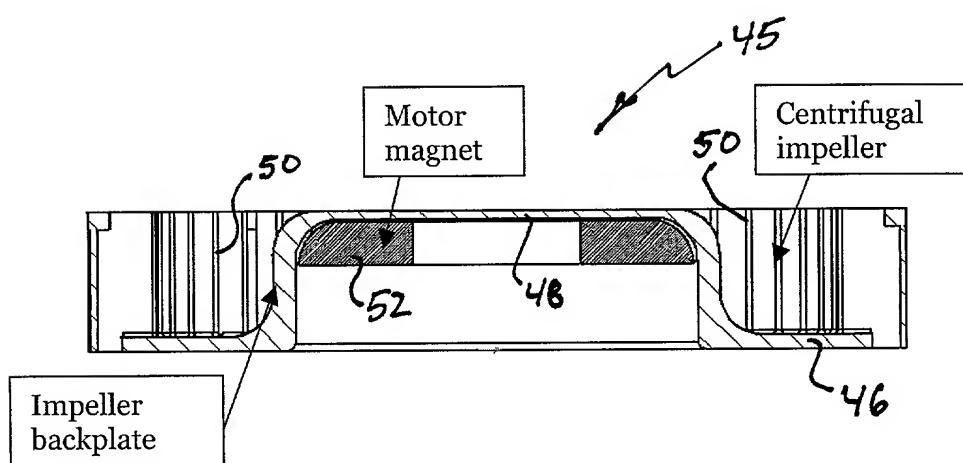


Figure 10
Impeller w/ motor magnet